CLAIMS

1. A hollow cap comprising:

a radially surrounding sidewall;

a top that radially extends from a substantially central cap opening to an end of the top at the sidewall of the cap;

a post adapted for sealingly engaging a receiver opening of a receiver piece;

a support structure supporting the post in a spaced position from the cap opening; and

an internal cap ring formed on an inner surface of the sidewall of the cap, where an outline of the support structure forms a passageway between the cap opening and a hollow space within the cap.

2. The cap of claim 1, wherein the support structure contacts an inner surface of the top.

3. The cap of claim 1, wherein the support structure connects the post to opposite sides of the cap.

4. The cap of claim 1, wherein the cap ring forms a sealing surface with a contact surface of the receiver piece.

5. The cap of claim 1, wherein the top forms a ledge over the sidewall.

6. The cap of claim 1, wherein the top is a radial ramp that radially ramps down from the substantially central cap opening to the end of the top at the sidewall.

7. The cap of claim 6, wherein the radial ramp is concave, convex or linear.

8. A closure arrangement comprising:

a hollow cap comprising a radially surrounding sidewall, a top that radially extends from a substantially central cap opening to an end of the top at the sidewall, a post, a support structure supporting the post in a spaced position from the cap opening, and an internal cap

ring formed on an inner surface of the sidewall of the cap, an outline of the support structure forming a passageway between the cap opening and a hollow space within the cap; and

a receiver piece comprising a radially surrounding sidewall, a substantially central receiver opening for sealingly receiving the post of the cap, a receiver ring formed around an outer surface of the sidewall of the receiver piece, where the receiver opening extends completely through the receiver piece and the receiver ring is adapted to lock the cap ring when the cap is pulled away from the receiver piece.

9. The arrangement of claim 8, wherein the support structure contacts an inner surface of the top.

10. The arrangement of claim 8, wherein the support structure connects the post to opposite sides of the cap.

11. The arrangement of claim 8, wherein the cap ring forms a sealing surface with a contact surface of the receiver piece.

12. The arrangement of claim 8, wherein the receiver ring forms a sealing surface with a contact surface of the cap.

13. The arrangement of claim 8, wherein the cap further comprises a snap ring formed on the inner surface of the sidewall of the cap to snap over the receiver ring when the cap is in a fully closed position.

14. The arrangement of claim 8, wherein the top forms a ledge over the sidewall.

15. The arrangement of claim 8, wherein the top is a radial ramp that radially ramps down from the substantially central cap opening to the end of the top at the sidewall.

16. The arrangement at claim 15, wherein the radial ramp is linear, concave or convex.

17. A container comprising the arrangement of claim 8.

18. The container of claim 17, comprising a neck comprising the receiver piece integrally molded therewith.

19. A dispenser comprising:

a radially surrounding dispenser sidewall having a first end, where the dispenser sidewall is molded as one piece, the first end comprising:

a hollow cap comprising a radially surrounding sidewall, a top that radially extends from a substantially central cap opening to an end of the top at the sidewall of the cap, a post, a support structure supporting the post in position spaced from the cap opening, and an internal cap ring formed on an inner surface of the sidewall of the cap, an outline of the support structure forming a passageway between the cap opening and a hollow space within the cap; and

a receiver piece comprising a radially surrounding sidewall, substantially central receiver opening for sealingly receiving the post of the cap, a receiver ring formed around an outer surface of the sidewall of the receiver piece, where the receiver opening extends completely through the receiver piece and the receiver ring is adapted to lock with the cap ring when the cap is pulled away from the receiver piece.

20. The dispenser of claim 19, wherein the support structure contacts an inner surface of the top.

21. The dispenser of claim 19, wherein the support structure connects the post to opposite sides of the cap.

22. The dispenser of claim 19, wherein the cap ring forms a sealing surface with a contact surface of the receiver piece.

23. The dispenser of claim 19, wherein the receiver ring forms a sealing surface with a contact surface of the cap.

24. The dispenser of claim 19, wherein the cap further comprises a snap ring formed on the inner surface of the sidewall of the cap to snap over the receiver ring when the cap is in a fully closed position.

25. The cap of claim 19, wherein the top forms a ledge over the sidewall.

26. The dispenser of claim 19, wherein the top is a radial ramp that radially ramps down from the substantially central cap opening to the end of the top at the sidewall.

27. The cap of claim 26, wherein the radial ramp is concave, convex or linear.

28. The dispenser of claim 19, wherein the first end of the dispenser sidewall further comprises a dome between the dispenser sidewall and the receiver piece.

29. The dispenser of claim 28, wherein the first end of the dispenser sidewall further comprises a hinged interconnection formed between the dome and the dispenser sidewall.

30. A method of making a dispenser comprising the steps of:

molding in a mold a body as one piece;

the body comprising:

a radially surrounding dispenser sidewall having a first end that comprises:

a receiver piece comprising a radially surrounding sidewall and a receiver ring formed around an outer surface of the sidewall of the receiver piece;

forming a substantially central receiver opening on the receiver piece, where the opening extends completely through the receiver piece; and

placing on top of the receiver piece a hollow cap comprising a radially surrounding sidewall, a top that radially extends from a substantially central cap opening to an end of the top at the sidewall of the cap, a post for sealingly engaging the receiver opening, a support structure supporting the post in a spaced position from the cap opening, and an internal cap ring formed on an inner surface of the sidewall of the cap, where an outline of the support structure forms a passageway between the cap opening and a hollow space within the cap and the receiver ring is adapted to lock the cap ring when the cap is pulled away from the receiver piece.

31. The method of claim 30, wherein the support structure contacts an inner surface of the top.

32. The method of claim 30, wherein the support structure connects the post to opposite sides of the cap.

33. The method of claim 30, wherein the cap ring forms a sealing surface with a contact surface of the receiver piece.

34. The method of claim 30, wherein the receiver ring forms a sealing surface with a contact surface of the cap.

35. The method of claim 30, wherein the cap further comprises a snap ring formed on the inner surface of the sidewall of the cap to snap over the receiver ring when the cap is in a fully closed position.

36. The method of claim 30, wherein the first end of the dispenser sidewall further comprises a dome between the dispenser sidewall and the receiver piece.

37. The method of claim 36, wherein the first end of the dispenser sidewall further comprises a hinged interconnection formed between the dome and the dispenser sidewall.

38. The method of claim 30, wherein the receiver piece comprises a protrusion and the forming a substantially central receiver opening comprises trimming the protrusion to create the substantially central receiver opening.

39. The method of claim 30, further comprising the steps of:

filling the body with a product via a second end of the body, the second end being open initially; and

sealing the second end with a seam to create a filled dispenser.

40. The method of claim 30, wherein the top forms a ledge over the sidewall.

41. The method of claim 30, wherein the top is a radial ramp that radially ramps down from the substantially central cap opening to the end of the top at the sidewall.

42. The method of claim 38, wherein the radial ramp forms is concave, convex or linear.

43. A hollow cap comprising:

a radially surrounding sidewall;

a top that radially extends from a substantially central cap opening to an end of the top at the sidewall of the cap;

a post adapted for sealingly engaging a receiver opening of a receiver piece;

a support structure supporting the post in a spaced position from the cap opening; and

a thread adapted for slidingly engaging a ramp of the receiver piece to slide the cap up or down the ramp.

44. The cap of claim 43, wherein the support structure contacts an inner surface of the top.

45. The cap of claim 43, wherein the support structure connects the post to opposite sides of the cap.

46. A closure arrangement comprising:

a hollow cap comprising a radially surrounding sidewall, a top that radially extends from a substantially central cap opening to an end of the top at the sidewall, a post, a support structure supporting the post in a spaced position from the cap opening, and a thread, an outline of the support structure forming a passageway between the cap opening and a hollow space within the cap; and

a receiver piece comprising a radially surrounding sidewall, a substantially central receiver opening for sealingly receiving the post of the cap, and a ramp for slidingly engaging the thread of the cap to slide the cap up or down the ramp, where the receiver opening extends completely through the receiver piece.

47. The arrangement of claim 46, wherein the support structure contacts an inner surface of the top.

48. The arrangement of claim 46, wherein the support structure connects the post to opposite sides of the cap.